



Docket No.: 31978-235608

(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Sergei A. Svarovsky et al.

Art Unit: Not Yet Assigned

Application No: 10/594,075

Examiner: Not Yet Assigned

Filed: September 22, 2006

Atty. Docket No: 31978-235608

Customer No:

For: CARBOHYDRATE-ENCAPSULATED

QUANTUM DOTS FOR BIOLOGICAL

IMAGING

26694
PATENT TRADEMARK OFFICE

FIRST SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT (IDS)

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the documents listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the documents be made of record therein and appear on any patent to issue therefrom. Copies of documents **B1-B10** and **C1-C19** are enclosed.

This First Supplemental Information Disclosure Statement is filed within three months of the U.S. filing date (37 CFR 1.97(b)(1)).

In accordance with 37 CFR 1.9(a)(2)(ii), Applicant has not submitted copies of U.S. patents and U.S. patent applications. Applicant submits herewith copies of foreign patents and non-patent literature in accordance with 37 CFR 1.98(a)(2).

In order to correct or add information to the citations presented in the Information Disclosure Statement previously filed on September 22, 2006, the following citations are

Application No.: 10/594,075 Docket No.: 31978-235608

represented in this First Supplemental Information Disclosure Statement: Svarovsky et al., Carbohydrate Research, Vol. 338 (2003), pp. 1925-1935 (document C11); Faulkner, www.thenewsstar.com, Oct. 22, 2003, pp. 1-2 (document C18); and Chen, Nano Letters, Vol. 3, No. 5 (2003), pp.581-584 (document C19).

In accordance with 37 CFR 1.97(g), the filing of this First Supplemental Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this First Supplemental Information Disclosure Statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

It is submitted that the First Supplemental Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed documents.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 22-0261, under Order No. 31978-235608. A Fee Transmittal is enclosed.

Dated: November 13,2006

Respectfully submitted,

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Sub	ostitute for form 1449/PTO	-		Complete if Known		
				Application Number	10/594,075	
11	NFORMATIO	N DIS	SCLOSURE	Filing Date	September 22, 2006	
S	TATEMENT	BY A	APPLICANT	First Named Inventor	Sergei A. Svarovsky	
				Art Unit	Not Yet Assigned	
(Use as many sheets as necessary)			necessary)	Examiner Name	Not Yet Assigned	
Sheet	1	of	4	Attorney Docket Number	31978-235608	

xami er		Document Number	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where
itials	Cite No.1	Number-Kind Code ² (if known)	MM-DD-YYYY	Applicant of Cited Document	Relevant Passages or Relevant Figures Appear
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PTO/SB/08A/B (09-06)
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Sut	estitute for form 1449/PTO			Complete if Known		
				Application Number	10/594,075	
11	NFORMATION	1 DI	SCLOSURE	Filing Date	September 22, 2006	
S	TATEMENT B	3Y /	APPLICANT	First Named Inventor	Sergei A. Svarovsky	
				Art Unit	Not Yet Assigned	
	(Use as many sh	eets as	s necessary)	Examiner Name	Not Yet Assigned	
Sheet	2	of	4	Attorney Docket Number	31978-235608	

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		FOI	REIGN PATEN	T DOCUMENTS		
Examiner Initials*	Cite No.1	Foreign Patent Document Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T [®]
	B1	WO 2005/093422 A2	10-06-2005	U.S. Department of Health and Human Services		
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	B5	EP 0 810 853 B1	08-25-2004	Elan Pharma International Limited, Wood et al.		
	B6	PCT/US2005/009344 "Notification Concerning Transmittal of Copy of Int'l Prelim. Report on Patentability" and "Written Opinion of the ISA"	mailed 10-05-2006	U.S. Department of Health and Human Services		
	B7	WO 2006/093516 A2	09-08-2006	The Regents of the University of California		
	B8	International Search Report, date, issued in PCT/US2003/34897	mailed 08-20-2004	U.S. Department of Health and Human Services		
	B9	International Search Report and Written Opinion of the International Searching Authority, issued in PCT/US2005/009344	mailed 12-21-2005	U.S. Department of Health and Human Services		
	B10	International Preliminary Report on Patentability, date, issued in PCT/US2005/009344	mailed 10-05-2006	U.S. Department of Health and Human Services		

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Examiner Date Signature Considered			
Signature Considered	Examiner	Date	
	Signature	Considere	d

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Sut	Substitute for form 1449/PTO			Complete if Known		
				Application Number	10/594,075	
IN	NFORMATION	1 DI	SCLOSURE	Filing Date	September 22, 2006	
l s	TATEMENT B	3Y /	APPLICANT	First Named Inventor	Sergei A. Svarovsky	
				Art Unit	Not Yet Assigned	
	(Use as many sh	eets as	necessary)	Examiner Name	Not Yet Assigned	
Sheet	3	of	4	Attorney Docket Number	31978-235608	

		NON PATENT LITERATURE DOCUMENTS						
Examiner nitials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Т					
	C1	PALE-GROSDEMANGE et al., "Formation of Self-Assembled Monolayers by Chemisorption of Derivatives of Oligo(ethylene glycol) of Structure HS(CH ₂) ₁₁ (OCH ₂ CH ₂) _m OH on Gold", J. Am. Chem. Soc., Vol. 113, 1991 (pp. 12-20)						
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	C8	CHEN et al., "Luminescent CdS quantum dots as selective ion probes", published in Anal. Chem., 74(19), October 1, 2002, pp. 5132-8						
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	C14	(SEARCH 1) Results of LEXIS search performed September, 2004. Search string = atleast10(quantum dot or quantum confin! or nanocrystal!) and atleast10(bio!) and (mercaptoalkanoic or mercaptoalk! or mercaptosuccinic or mercaptoformic or mercaptoacetic or mercaptopropionic or mercaptobutyric or mercaptovaleric or mercaptocaproic or mercaptocaprylic or mercapto*****oic or mercapto*****oic or thioalkanoic or thioalk! or thiosuccinic or thioformic or thioacetic or thiopropionic or thiobutyric or thiovaleric or thiocaprylic or thio*****oic or thio******oic)						
	C15							
	C16	(SEARCH 3) Results of LEXIS search performed September, 2004. Search string = (quantum dot or quantum confin! or nanocrystal!) and bio! and (mercapto! or thio!)						
	C17	(SEARCH 4) Results of LEXIS search performed September, 2004. Search string = quantum						
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Subst	titute for form 1449/PTO			Complete if Known		
				Application Number	10/594,075	
IN	FORMATION	N DI	SCLOSURE	Filing Date	September 22, 2006	
SI	TATEMENT I	BY /	APPLICANT	First Named Inventor	Sergei A. Svarovsky	
				Art Unit	Not Yet Assigned	
	(Use as many sh	eets as	s necessary)	Examiner Name	Not Yet Assigned	
Sheet	4	of	4	Attorney Docket Number	31978-235608	

	dot or quantum confin! or nanocrystal!) and bio! and glycol	
C18	FAULKNER, "La. Tech Researches "Smart Tattoo" To Benefit Diabetics", www.thenewsstar.com, October 22, 2003 (pp. 1-2).	
C19	CHEN, "Synthesis of Glyconanospheres Containing Luminescent CdSe-ZnS Quantum Dots", Nano Letters, Vol. 3, No. 5, 2003 (pp. 581-584).	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Examiner	Date
Signature	Considered

^{&#}x27;Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

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Complete if Known Effective on 12/08/2004. 10/594,075 ees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818). **Application Number** September 22, 2006 TRANSMITTAL Filing Date Sergei A. Svarovsky First Named Inventor For FY 2005 Examiner Name Not Yet Assigned Not Yet Assigned Applicant claims small entity status. See 37 CFR 1.27 Art Unit 31978-235608 TOTAL AMOUNT OF PAYMENT 0.00 Attorney Docket No. (\$) METHOD OF PAYMENT (check all that apply) Other (please identify): Check Credit Card Money Order None Venable LLP x Deposit Account Deposit Account Number: 22-0261 Deposit Account Name: For the above-identified deposit account, the Director is hereby authorized to: (check all that apply) Charge fee(s) indicated below Charge fee(s) indicated below, except for the filing fee Charge any additional fee(s) or underpayment of x Credit any overpayments fee(s) under 37 CFR 1.16 and 1.17 **FEE CALCULATION** 1. BASIC FILING, SEARCH, AND EXAMINATION FEES SEARCH FEES **EXAMINATION FEES FILING FEES Small Entity Small Entity** Small Entity Fees Paid (\$) **Application Type** Fee (\$) Fee (\$) Fee (\$) Fee (\$) Fee (\$) Fee (\$) 200 100 Utility 300 150 500 250 Design 200 100 100 50 130 65 300 150 160 80 Plant 200 100 Reissue 300 150 500 250 600 300 200 0 0 0 Provisional 100 0 Small Entity 2. EXCESS CLAIM FEES Fee (\$) Fee (\$) Fee Description Each claim over 20 (including Reissues) 50 25 Each independent claim over 3 (including Reissues) 200 100 Multiple dependent claims 360 180 **Total Claims** Extra Claims Fee Paid (\$) **Multiple Dependent Claims** Fee (\$) Fee (\$) Fee Paid (\$) - 20 = HP = highest number of total claims paid for, if greater than 20. Indep. Claims Extra Claims Fee Paid (\$) Fee (\$) HP = highest number of independent claims paid for, if greater than 3. 3. APPLICATION SIZE FEE If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s). Number of each additional 50 or fraction thereof Fee Paid (\$) Extra Sheets - 100 = /50 (round up to a whole number) x 4. OTHER FEE(S) Fees Paid (\$) Non-English Specification, \$130 fee (no small entity discount) Other (e.g., late filing surcharge): SUBMITTED BY Registration No. 46,722 Telephone (202) 344-4000 Signature (Attorney/Agent) Lars H. Genieser Date Name (Print/Type)

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Application Number 10/594,075 Filing Date **TRANSMITTAL** September 22, 2006 First Named Inventor **FORM** Sergei A. Svarovsky Art Unit Not Yet Assigned Examiner Name Not Yet Assigned (to be used for all correspondence after initial filing) Attorney Docket Number 31978-235608 Total Number of Pages in This Submission

ENCLOSURES (Check all that apply)						
X Fee Transmittal Form	Drawing(s)	After Allowance Communication to TC				
Fee Attached	Licensing-related Papers	Appeal Communication to Board of Appeals and Interferences				
Amendment/Reply	Petition	Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)				
After Final	Petition to Convert to a Provisional Application	Proprietary Information				
Affidavits/declaration(s)	Power of Attorney, Revocation Change of Correspondence Address	Status Letter				
Extension of Time Request	Terminal Disclaimer	X Other Enclosure(s) (please Identify below):				
Express Abandonment Request	Request for Refund	Form PTO/SB/08A and 29 cited documents				
First Supplemental Information X Disclosure Statement	CD, Number of CD(s)					
Certified Copy of Priority Document(s)	Landscape Table on CD					
Reply to Missing Parts/ Incomplete Application	Remarks					
Reply to Missing Parts under 37 CFR 1.52 or 1.53						
SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT						
Firm Name VENABLE LLP						
Signature MMH SIMM						
Printed name Lars H. Genieser						
Date 11/13/2	<i>006</i> Reg. No.	46,722				